Cahp-Tnai Nursing Survey In India

VHAI

Report 1975

RECOMMENDATIONS OF

CO-ORDINATING AGENCY FOR HEALTH PLANNING

NEW DELHI

RECOMMENDATIONS OF THE COORDINATING AGENCY FOR HEALTH PLANNING BASED ON THE REPORT OF THE CAHP-TNAI NURSING SURVEY IN INDIA

A study of nursing personnel needs and of nursing training programs has been a matter for concern since the establishment of the CAHP in 1970. A Steering Committee composed of nursing experts and representatives of a few other academic disciplines was formed to guide the study, which was conducted by a veteran research scholar.

The Board of Directors of the CAHP does not agree that the recommendations of the Staff and Steering Committee as presented in the full report are sufficiently radical to meet the country's need of nursing care. The CAHP's lack of concurrence reflects both its understanding of the data in light of its own objectives as well as what it sees to be the objectives of the study.

The problem of methodology and study were many and the CAHP is grateful to all who have assisted or participated in this study in any way; it is particularly grateful to our major collaborator, the Trained Nurses Association of India.

The full report of the Staff, approved by the Steering Committee, contains much valuable data on which many and varied recommendations could be made, depending on the objective of the data analysis.

The CAHP invites any one interested to examine the data in the printed report as well as the original data collected, which will be made available at CAHP, and to use the product of this study for whatever purposes may serve the nurses and the people of India.

We do not pretend that this study covers all that might have been covered, nor do we pretend that it is error free. We offer it simply as our best effort within our available personnel, time and money. For inaccuracies and inadequacies we ask your understanding.

Essentially, we see the objectives of the study as related primarily to the role the voluntary sector could play in responding to the needs o the country's total health system. Therefore, our recommendations are intended for the voluntary sector. They are not intended to interfere with standard systems.

The pages that immediately follow contain the recommendations of the CAHP. They are separated in accordance with the study objectives, though it is recognised that integration of the recommendations under manpower and training objectives would have been ideal. They are separated for purposes of clarity. The supporting and more detailed data will be found in the complete report.

First, let us re-state the study objectives. They are as follows :

OVERALL STUDY OBJECTIVE

To study the nurse in the Indian context and assess the nursing manpower needs of the country in relation to available training potentials with a view to determining possible corrective measures.

SPECIFIC STUDY OBJECTIVES

Manpower:

To determine the overall nursing manpower needs of hospitals and community, and assess how best Christian and other voluntary institutions can contribute thereto.

To estimate regional disparities between needs and available nursing personnel and to determine possible corrective measures.

Training:

To study the existing training systems (quantitative and qualitative) so as to identify the future role of Christian and other voluntary nursing training centres in relation to the country's total health system.

Sociological :

To assess the socio-economic impact of nursing training on the individual and the community.

MANPOWER OBJECTIVE

To determine the overall nursing manpower needs (hospital and community) and

assess how best Christian and other voluntary institutions can contribute thereto.

To estimate regional disparities between needs and available nursing personnel and to determine possible corrective measures.

The present pool of nurses is estimated to be :

General Nurses	68,252
Auxiliary Nurse Midwives	41,522

The future manpower needs were assessed by various methods as follows :

If determined by present 1 : 2 . 3 nurse : doctor ratio by 1990

General Nurses	1,11,455
Auxiliary Nurse Midwives	71,951

If determined by 3 : 1 nurse : doctor ratio by 1990 All categories 10,80,000

If determined by 1 : 1000 nurse : population ratio by 1980 6,68,900

If detemined by 1 : 500 nurse : population ratio by 1990 16,67,600

If determined on projections of preliminary drafts of the Fifth Five year Plan

Ceneral Nurses	1,35,850
Auxiliary Nurse Midwives	1,00,000

Shortfall for Fifth Five year plan based on present Outturn :

General Nurses	25,233
Auxiliary Nurse Midwives	32,000

The Regional disparities are separated into disparities in employment, outturn, urban/rural, distribution of schools, and those other criteria which we considered to be priorities in terms of our objectives. For information and ease in comparison, the following pages concern general population on a state wide, urban/rural basis for the whole of India and regional disparitles.

Population Distribution—Urban and Rural Within Each State—1971 Census (Provisional)

State	Total Population	Percentage Urban	Urban Population	Percentage Rural	Rural Population	% of total Population
1. Uttar Pradesh	88,364,779	14.00	12,368 487	86.00	75,996,292	16.14
2. Bihar	56,332,246	10.04	5,653,789	89.96	50,678,457	10.31
3. Maharashtra	50,335,492	31.20	15,703,403	68.80	34,632,089	9.20
4. West Bengal	44,440,095	24.59	10,928,399	75.41	33,511,696	8.13
5. Andhra Pradesh	43,394,951	19.35	8,395,805	80.64	34,999,146	7.93
6. Madhya Pradesh	41,650,684	16.26	6,770,323	83.74	34,880,361	7.58
7. Tamil Nadu	41,103,125	30.28	12,446,860	69.72	28,656,265	7.52
8. Mysore	29,263,334	24.31	7,114,707	75.69	22,148,627	5.34
9. Gujarat	26,687,186	28.13	7,507,092	71.87	19,180,094	4.87
10. Rajasthan	25,724,142	17.61	4,529,325	82.39	21,194,817	4.70
11. Orissa	21,934,827	8.27	1,814,491	91.73	20,120,336	4.01
12. Kerala	21,280,397	16.28	3,465,414	83.72	17,814,983	3.89
13. Assam	14,952,108	8.39	1,254,979	91.61	13,697,129	2.72
14. Punjab	13,472,972	23.80	3,207,145	76.20	10,265,827	2.40
15. Haryana	9,971,165	17.78	1,773,336	82.22	8,197,829	1.82
16. Jammu & Kashmir	4,615,176	18.26	842,759	81.74	3,772,417	0.84
17. Delhi	4,044,338	89.75	3,629,842	10.25	414,496	0.73
18. Himachal Pradesh	3,424,332	7.06	241,629	92.94	3,182,703	0.63
19. Tripura	1,556,822	7.82	121,775	92.18	1,435,047	0.28
20. Manipur	1,069,555	13.25	141,695	86.75	927,860	0.19
21. Meghalaya	983,336	13.02	128,011	86.98	855 325	0.18
22. Goa, Daman & Diu	857,180	26.30	225,399	73.70	631,781	0.15
23. Nagaland	515,561	9.91	51,071	90.09	464,490	0.09
24. Pondicherry	471,347	42.06	198,271	57.94	273,076	0.06
25. Chandigarh	256,979	90.67	233,004	9.33	23,975	0.04
Totals	547,367,926	19.87	108,787,082	80.13	438,580,844	

General Nurse

State	Nurse to Population	Puplic Sector	Private Sector	Total
Delhi	1 : 2,856	1,086	330	1,416
Maharashtra	1 : 4,848	8,439	1,944	10,383
Himachal Pradesh	1 : 5,660	564	41	605
Tamil Nadu	1 : 7,365	4,072	1,509	5,581
Mysore	1 : 8,342	2,747	761	3,508
Kerala	1 : 8,665	1,508	948	2,456
Assam	1 : 10,398	654	784	1,438
Punjab	1 : 10,567	1,000	275	1,275
Andhra Pradesh	1 : 11,245	3,300	559	3,859
West Bengal	1 : 11,908	2,997	735	3,732
Madhya Pradesh	1 : 14,553	2,361	501	2,862
Haryana	1 : 15,653	578	59	637
Rajasthan	1 : 17,381	1,288	192	1,480
Gujarat	1 : 21,504	486	755	1,241
Uttar Pradesh	1 : 23,457	3,081	686	3,767
Bihar	1 : 25,805	1,361	822	2,183
Orissa	1 : 25,806	718	132	850

Auxiliary Nurse Midwife

Tamil Nadu	1 : 6,047	6,328	469	6,797
Delhi	1 : 8,187	469	25	494
Himachal Pradesh	1 : 8,212	410	7	417
Madhya Pradesh	1 : 12,378	3,324	41	3,365
Mysore	1 : 12,410	2,178	180	2,358
Kerala	1 : 12,496	1,571	132	1,703
Haryana	1 : 12,542	742	53	795
Assam	1 : 14,146	569	488	1,057
Andhra Pradesh	1 : 14,810	2,785	155	2,930
Maharashtra	1 : 16,242	2,989	110	3,099
Rajasthan	1 : 16,461	1,503	41	1,544
Gujarat	1 : 18,967	1,407	0	1,407
Punjab	1 : 22,644	425	120	595
Bihar	1 : 22,909	2,122	337	2,459
Orissa	1 : 26,082	750	91	841
Uttar Pradesh	1 : 29,106	2,839	197	3,036
West Bengal	1 : 76,358	363	219	582

Disparities in Distribution—Urban and Rural

	Rural		Urban	
General Nurses	9.68%	(6,607)	90.32%	(61,645)
Auxiliary Nurse Midwives	82.35%	(34,193)	17.65%	(7,329)

Regional Disparities in Distribution of Unemployed General Nurses.

State	June 1971 No.	%	Dec. 1971 No.	%	June 1972 No.	%
Kerala	321	19.6	391	23.4	381	23.3
Andhra Pradesh	196	12.0	302	18.4	256	15.6
Mysore	77	4.7	221	13.5	219	13.4
Delhi	164	10.0	119	7.2	213	13.0
Maharashtra	141	8.6	129	7.9	210	12.8
Madhya Pradesh	106	6.4	172	10.5	145	8.8
Tamil Nadu	225	13.1	106	6.4	117	7.2
Bihar	72	4.4	79	4.8	112	6.9
West Bengal	71	4.3	69	4.2	111	6.7
Rajasthan	31	1.8	39	2.3	57	3.5
Haryana	22	1.3	14	0.85	50	3.0
Punjab	15	0.91	11	0.67	34	2.0
Uttar Pradesh	54	3.3	40	2.4	33	2.0
Orissa	20	1.2	36	2.2	31	1.8
Himachal Pradesh	9	0.55	11	0.67	15	0.9
Assam	13	0.79	10	0.61	15	0.9
Gujarat	23	1.4	13	0.79	13	0.79

Regional Disparities in Distribution of Unemployed Auxiliary Nurse Midwives.

Kerala	340	14.63	331	14.24	520	22.33
Andhra Pradesh	803	34.55	564	24.27	515	22.12
Tamil Nadu	448	13.2	402	17.3	492	21.1
Rajasthan	121	5.21	81	3.48	193	8.17
Bihar	77	5.31	123	5.29	97	4.17
Maharashtra	80	3.44	79	3.38	94	4.04
Madhya Pradesh	44	1.87	41	1.76	88	3.78
Mysore	49	2.1	95	4.0	86	3.7
West Bengal	49	2.1	58	2.49	67	2.88
Delhi	56	2.4	55	2.3	47	2.0
Haryana	48	2.06	54	2.32	39	1.24
Uttar Pradesh	36	1.54	38	1.63	30	1.2
Gujarat	31	1.33	21	0.9	27	1.15
Punjab	28	1.20	28	1.2	19	0.81
Himachal Pradesh	6	0.25	4	0.17	11	0.47
Assam	17	0.73	21	0.9	11	0.47
Orissa	13	0.55	7	0.3	9	0.38

Regional Disparities in Outturn

General Nurses

State	Nurse Population
Delhi	1 : 18,637
Pondicherry	1 : 23,567
Chandigarh	1 : 39,535
Maharashtra	1 : 39,791
Mysore	1 : 54,191
Kerala	1 : 59,112
Tamil Nadu	1 : 59,570
Punjab	1 : 61,803
Goa	1 : 71,431
Rajasthan	1 : 85,747
Gujarat	1 : 94,972
Assam, Meghalaya, Nagaland	1 : 1,11,912
Madhya Pradesh	1 : 1,20,377
West Bengal, Manipur, Tripura	1 : 1,22,888
Andhra Pradesh	1 : 1,26,886
Haryana	1 : 1,36,591
Himachal Pradesh	1 : 1,36,973
Orissa	1 : 1,81,279
Bihar	1 : 2,20,047
Uttar Pradesh	1 : 2,98,529
Jammu & Kashmir	1 : 6,59,311

Auxiliary Nurse Midwives

Goa	1 : 24,490
Mysore	1 : 57,379
Rajasthan	1 : 64,310
Maharashtra	1 : 75,127
Andhra Pradesh	1 : 83,452
Gujarat	1 : 88,957
Haryana	1 : 93,188
Madhya Pradesh	1 : 97,771
Tamil Nadu	1 : 98,568
Punjab	1 : 1,07,784
NEFA	1 : 1,11,185
West Bengal	1 : 1,14,736
Assam	1 : 1,21,859
Himachal Pradesh	1 : 1,36,973
Kerala	1 : 1,57,632
Orissa	1 : 1,86,741
Bihar	1 : 2,01,187
Uttar Pradesh	1 : 2,44,778
Jammu & Kashmir	1 : 4,01,517
Delhi	1 : 4,49,376

Regional Disparities in percentage of Outturn to Admission.

General Nurse	Percentage
Pondicherry	100
Madhya Pradesh	96.11
Mysore	94.41
West Bengal	87.04
Punjab	82.86
Uttar Pradesh	79.78
Haryana	78.49
Goa	75.00
Kerala	72.28
Maharashtra	70.02
Himachal Pradesh	69.44
Delhi	66.56
Assam	65.91
Gujarat	65.04
Orissa	64.36
Andhra Pradesh	62.52
Rajasthan	61.27
Tamil Nadu	57.29
Bihar	46.19
Jammu & Kashmir	36.84

Auxiliary Nurse Midwives

Tamil Nadu	94.55
Mysore	85.97
Orissa	84.68
Punjab	82.56
Haryana	82.30
Uttar Pradesh	78.45
Bihar	78.21
Madhya Pradesh	76.89
Gujarat	72.99
Andhra Pradesh	69.86
Kerala	68.87
Maharashtra	64.92
Assam	57.89
West Bengal	56.09
Himachal Pradesh	52.08
Rajasthan	45.20
Delhi	30.00
Jammu & Kashmir	25.00

General Nursing Schools. Some training centres have by general nursing and auxiliary nurse midwifery training. These are not included in these schedules. See separate chart following.

State	% of all GN Schools	State	% of Church related GN Schools
Maharashtra	12.3	Andhra Pradesh	14.9
Kerala	10.8	Kerala	14.9
Uttar Pradesh	8.7	Tamil Nadu	11.9
Andhra Pradesh	8.2	Assam & Nagaland	10.4
Madhya Pradesh	7.2	Maharashtra	7.4
Tamil Nadu	5.6	Madhya Pradesh	7.4
Delhi	5.1	Mysore	7.4
Gujarat	5.1	Uttar Pradesh	5.9
Assam & Nagaland	4.6	Delhi	2.9
Bihar	4.6	Gujarat	2.9
Mysore	4.6	Bihar	2.9
West Bengal	4.6	Haryana	2.9
Haryana	2.6	Orissa	2.9
Orissa	2.6	Punjab	2.9
Punjab	2.6	Rajasthan	1.4
Rajasthan	2.6	West Bengal	.0
Himachal Pradesh	1.0	Himachal Pradesh	.0
Chandigarh	0.5	Chandigarh	.0
Pondicherry	0.5	Pondicherry	.0
Goa	0.0	Goa	.0
Jammu & Kashmir	0.0	Jammu & Kashmir	.0
Manipur	0.0	Manipur	.0
Tripura	0.0	Tripura	.0

Auxiliary Nurse Midwifery Schools. Some training centres have both general nursing and auxiliary nurse midwifery training. These are not included in the schedules. See separate chart following.

State	% of all ANM Schools	State	% of Church related ANM schools
Madhya Pradesh	12.7	Andhra Pradesh	21.8
Gujarat	10.8	Kerala	12.5
Maharashtra	10.8	Tamil Nadu	12.5
Andhra Pradesh	8.9	Assam & Nagaland	9.3
Rajasthan	8.1	Maharashtra	9.3
Bihar	6.9	Mysore	9.3
Uttar Pradesh	6.9	Bihar	6.2
Mysore	6.2	Madhya Pradesh	6.2
Orissa	5.8	Uttar Pradesh	6.2
West Bengal	4.6	Punjab	3.1
Tamil Nadu	4.2	Delhi	2·1
Assam & Nagaland	3.1	Gujarat	.0
Kerala	2.7	Haryana	.0
Haryana	2.3	Orissa	.0
Punjab	2.3	Rajasthan	.0
Himachal Pradesh	.77	West Bengal	.0
Jammu & Kashmir	.77	Chandigarh	.0
Goa	.38	Goa	.0
Manipur	.38	Himachal Pradesh	.0
Tripura	.38	Jammu & Kashmir	.0
Delhi	.0	Pandicherry	.0
Chandigarh	.0	Manipur	.0
Pondicherry	.0	Tripura	.0

Regional Disparities in Distribution of Schools (continued).

Both GN and ANM Schools

State	% of all GN/ ANM Schools	State	% of Church related GN/ANM Schools
Maharashtra	16.6	Andhra Pradesh	25.0
Mysore	16.6	Bihar	25.0
Andhra Pradesh	9.4	West Bengal	25.0
Madhya Pradesh	9.4	Punjab	12.5
Assam & Nagaland	7.4	Rajasthan	12.5
Rajasthan	7.4		
Tamil Nadu	5.5		
West Bengal	5.5		
Bihar	3.4		
Gujarat	3.4		
Punjab	3.4		
Jammu & Kashmir	3.4		
Haryana	1.8		
Orissa	1.8		
Delhi	1.8		
Goa	1.8		
Kerala	.0		
Uttar Pradesh	.0		
Chandigarh	.0		
Himachal Pradesh	.0		
Pondicherry	.0		
Manipur	.0		
Tripura	.0		

All types of Schools—Combined Percentages.

State	% of the GN/ ANM Schools	State	% of Church related School
Maharashtra	12.0	Andhra Pradesh	17.7
Madhya Pradesh	10.2	Kerala	13.0
Andhra Pradesh	8.6	Tamil Nadu	11.3
Gujarat	7.9	Assam & Nagaland	9.3
Uttar Pradesh	6.9	Maharashtra	7.4
Mysore	6.7	Mysore	7.4
Bihar	5.7	Madhya Pradesh	6.5
Rajasthan	5.7	Bihar	5.6
Kerala	5.5	Uttar Pradesh	5.6
Tamil Nadu	4.9	Punjab	3.7
West Bengal	4.7	Gujarat	1.8
Assam & Nagaland	4.1	Haryana	1.8
Orissa	4.1	Orissa	1.8
Punjab	2.5	Rajasthan	1.8
Haryana	2.3	West Bengal	1.8
Delhi	2.1	Delhi	1.8
Himachal Pradesh	.79	Jammu & Kashmir	,9
Jammu & Kashmir	.79	Chandigarh	.0
Goa	.39	Goa	.0
Chandigarh	.18	Himachal Pradesh	.0
Pondicherry	.18	Pondicherry	.0
Manipur	.18	Manipur	.0
Tripura	.18	Tripura	.0

Religious Distribution in Employment

	Hindu	Christian	Muslim	Others
General Nurse	30.3%	64.8%	2.5%	2.4%
Auxiliary Nurse Midwife	78.6%	18.6%	—	2.8%

Religious Distribution of Student Nurses

	Hindu	Christian	Muslim	Others
General Nurse	34.5%	58.8%	1.7%	4.9%
Auxiliary Nurse Midwife	66.5%	31.0%	1.8%	0.6%

Distribution by Employment—Government, Church-related, Private

	Government	Church related	Others
General Nurse	56.4%	30.5%	13.1%
Auxiliary Nurse Midwife	85.2%	7.4%	7.4%

Percentage of Nurses in Institutional Employment

	Institutionally employed	Others
General Nurse	91.68%	8.32%
Auxiliary Nurse Midwife	91.18%	8.82%

Distribution of Time spent by Type of service—Percentage

	Administration	Supervision	Teaching	Patient Care	Public Health	Family Planning	More than one job
General Nurse	7.7	8.8	8.8	56.5	—	—	18.2
Auxiliary Nurse Midwife	—	—	—	40.0	32.0	25.0	3.0

Increase in Number of Training Schools—1966 to 1970

	1966	1970
General Nurse Schools		
Government	100	103
Church related	63	67
Private	27	24
Auxiliary Nurse Midwife Schools		
Government	165	170
Church related	25	30
Private	41	39

POSSIBLE CORRECTIVE MEASURES

In the Approach to the Fifth Five Year Plan, the Government of India states in part :

> "Availability of health facilities in rural areas continues to be lopsided. The norm will have to be related to adequate extension of medical and health care to rural areas ..... The emphasis on rural health will have to be on preventive medicine, family planning, nutrition and detection of early morbidity, with adequate arrangements for referring serious cases to an appropriate higher echelon such as the tehsil or the district hospital."

It is in this light that we examine the following tables. The 1971 census indicates that as of that time 80.13% of the total population is a rural population and the survey data indicate that only 9.68% of the General Nurses are working in rural areas as opposed to 82.35% of the auxiliary nurse midwives. An examination of the distribution of time by type of service, shows that the auxiliary nurse midwife spends more than one-half of her time in public health and family planning i.e., those types of service which the Government of India establishes as priorities in the Approach to the Fifth Five Year Plan.

Hence, it would seem that corrective action in general require that the Christian and other voluntary institutions should focus their energies on the training and employment of auxiliary nurse midwives or a similar cadre of nursing personnel (See Recommendations on Training Objective p. XVIII). In this connection it should be noted that while 64.8% of the present general nurses are Christians (a notable contribution to the health services of the country by a minority community), only 18.6% of the auxiliary nurse midwives come from the Christian community. Therefore, it appears that corrective measures should be undertaken to motivate young women to this type of service to meet a priority need in rural India. It should be noted, however, that the present enrollment in nursing schools demonstrates an increased interest in ANM programmes among young women.

In order to accomplish this objective, Christian and other voluntary institutions must develop more village health services in which auxiliary nurse midwives would be employed. The data available at the time of the survey indicate that the government employs 85.2% of the auxiliary nurse midwives while Church-related and other private institutions together employ only 14.8%. This should be contrasted with the employment distribution of general nurses :

church-related and other private institutions employ 43.6% as compared with government employment of 56.4%. It is also relevant to note that of the estimated 320,000 hospital beds in the country, 18.5% are Church-related.

If we examine the regional disparities in distribution of schools, it is notable that 17.7% of all Church-related schools are located in Andhra Pradesh which has only 7.93% of the total population, and 13% of all Church-related schools are in Kerala which has only 3.89% of the total population. This must be compared with Uttar Pradesh with 16.1% of the population and only 5.6% of the Church-related schools, and Bihar with 10.31% of the population and again only 5.6% of the Church-related schools.

If looked at in terms of the rural population only in relation to auxiliary nurse midwifery schools, Uttar Pradesh with a rural population of 75,996,292 has 6.9% of the auxiliary nurse midwifery schools (6.2% Church-related) and Bihar with a rural population of 50,678,457 also has 6.9% of the auxiliary nurse midwifery schools (6.2% Church-related). Compare this with Andhra Pradesh with 21.8% of Church-related auxiliary nurse midwifery schools for 34,999,146 rural population, Kerala with 12.5% for 17,814, 983 rural population, and Tamil Nadu also with 12.5% of Church-related auxiliary nurse midwifery schools for a rural population of 28,656,265.

Also to be noted is the relationship between ratios of outturn to admission of general nurses and auxiliary nurse midwives, especially in Bihar, where only 46.19% of those admitted to general nursing schools successfully complete the course, whereas 78.21% of those admitted to auxiliary nurse midwifery schools complete the course.

Regional disparities in employment and outturn are great. Delhi, for example, employs one general nurse per 2,856 population and Maharashtra one general nurse for 4,848, while Bihar and Orissa employ only one general nurse for 25,805 and in Uttar Pradesh the ratio is 1: 23,457.

And among the states, the disparity in the employment of auxiliary midwives is:

Delhi	1:8,187 with a rural population of	414,496
Tamil Nadu	1:6,047 with a rural population of	28,656,265
Bihar	1:22,909 with a rural population of	50,678,457
Orissa	1:26,082 with a rural population of	20,120,336
Uttar Pradesh	1:29,106 with a rural population of	75,996,292

In terms of outturn, the data for these same states is significant:

General Nurses	Delhi	1: 18,637
	Maharashtra	1: 39,791
	Bihar	1:2,20,047
	Orissa	1:1,81,279
	Uttar Pradesh	1:2,98,529
Auxiliary Nurse Midwives	Delhi	1:4,49,376
	Tamil Nadu	1: 98,568
	Bihar	1:2,01,187
	Orissa	1:1,86,741
	Uttar Pradesh	1:2,44,778

Attention needs to be given to the fact that the states with the highest ratio of employment and outturn, e.g., Delhi, Kerala, Andhra Pradesh, Maharashtra, are also the states with the highest percentages of unemployed nurses:

General Nurses	Delhi	13.0%
	Kerala	23.3%
	Andhra Pradesh	15.6%
	Maharashtra	12.8%
Auxiliary Nurse Midwives	Kerala	22.33%
	Andhra Pradesh	22.12%
	Tamil Nadu	21. 1%

It is significant that states with the lowest ratio of employment and outturn are also the states with the lowest percentage of unemployed nurses:

General Nurses	Bihar	6.9%
	Uttar Pradesh	2.0%
	Orissa	1.8%
Auxiliary Nurse Midwives	Bihar	4.17%
	Uttar Pradesh	1. 2%
	Orissa	0.38%

Also to be noted in considering the type of nursing personnel to be trained is the cost of the training the various categories. As best as can be ascertained from the survey data, these relative costs are as follows (excluding capital expenditure):

B.Sc. (Post Basic)	Rs. 14,501
B.Sc.	12,607
Lady Health Visitor	6,151
General Nurse Midwife	5,650
Auxiliary Nurse Midwife	3,185

From the data collected in the survey we recommend that the Church-related and other voluntary institutions should give priority to developing programmes for the training of auxiliary nurse midwives or some similar cadre, e.g., basic health worker, and that these programmes should be located in areas of greatest need, e.g., Uttar Pradesh Bihar and Orissa.

TRAINING OBJECTIVE

To study the training systems (quantitative and qualitative) so as to identify the future role of Christian and other voluntary nursing training centres, in relation to the country's total health system.

A closer examination of the following survey data may be helpful in an effort to suggest possible corrective measures and identify the possible future role of Christian and other voluntary nursing training centres in relation to the country's total health system. The priority of need, as we have seen from the approach to the Fifth Five Year Plan, is primary health care in rural areas. It is against this need that we analyse some of the data produced with respect to the qualitative aspect of the present training systems. The quantitative aspect has already been reviewed under the manpower objective section of this report.

Despite the Indian Nursing Council requirement for experience in community nursing, sixteen (16%) percent of the nursing schools report total non-compliance with this requirement. Of the eighty-four percent (84%) who reported that they

require community nursing experience as part of the student's training:

45% give both rural and urban posting
46.7% give only rural posting
8% give only urban posting.

In the various categories of training systems the distribution is as follows:

	Only Rural	Only Urban	Urban & Rural
B.Sc.	22%	—	78%
General Nurse	45%	15%	40%
Auxiliary Nurse Midwives	83%	6%	11%

It should be noted that even those reporting that the students are provided opportunities for community nursing experience, the majority spend less than four weeks in a rural village experience, often only on an unplanned, day at a time basis. The following is a summary of the data:

Broken	0/4 weeks	5/8 weeks	9/12 weeks
B.Sc.			
Urban	20%	20%	40%	20%
Rural	—	60%	—	40%
General Nurses				
Urban	18%	45%	36%	—
Rural	15%	38%	30%	—
Auxiliary Nurse Midwives				
Urban	50%	50%	—	—
Rural	28%	43%	—	28%

From our reading of the data, we conclude that neither the general nurse midwives nor the auxiliary nurse midwives can be considered prepared to meet effectively the primary health care needs of the rural areas general nurse midwives spend almost four years in the hospital setting, while 53% of them or less spend four weeks or less in rural community nursing; auxiliary nurse midwives intended to work in rural areas spend almost two years in the hospital setting, while 71% of them spend four weeks or less in rural community nursing.

The data raise many questions with respect to the quality of the community nursing experience. Very often, the teaching personnel take no responsibility for supervising the students in their field experience. For example, the schools report - that 60% of the auxiliary nurse midwives and 23% of the general nurses are said to be supervised by non-teaching personnel, e.g., the district health officers supervise the rural experience of the students.

Even though the experience is for such a short duration of time, all are said to receive experience in health teaching and domiciliary midwifery. In addition they are also said to participate in varied cummunity nursing experience as follows:

Health Planning:	
General Nurse	75%
Auxiliary Nurse Midwives	44%
Working in Health Centre:	
General Nurses	37%
Auxiliary Nurse Midwives	75%
Tuberculosis Clinic:	
General Nurses	55%
Auxiliary Nurse Midwives	44%

The following data were produced in an effort to ascertain the determinants of the students' clinical experience:

Service need of the training institution ONLY:	
General Nurses	28%
Auxiliary Nurse Midwives	12.5%
Service needs plus curriculum needs:	
B.Sc.	33%
General Nurses	33%
Auxiliary Nurse Midwives	12%
Curriculum needs only:	
B.Sc.	67%
General Nurse	39%
Auxiliary Nurse Midwives	78%

All of the above data with respect to the quality and duration of the community nursing experience seem to support a conclusion that these students can hardly be motivated or expected to effectively perform primary health care services at the village level.

The data to test the quality of nursing training programmes collected by the Survey Team was based apparently on the Indian Nursing Council's and the Trained Nurses Association of India's

criteria for quality nursing education. The data collected reflect the academic qualifications of the teaching staff, accommodations, visual aids, and library - facilities provided for the students; and the time spent in the class room and in supervised clinics. However, we measure the data against a quality test based on these criteria, it remains a fact that 90.32% of the general nurses are - working in urban areas and 91.68% are institutionally employed. 17.65% of the auxiliary nurse midwives are working in urban areas and 91.18% of them are institutionally employed. The training programmes as presently implemented have not succeeded in motivating and preparing the students to play a role in meeting the primary health care needs in rural India. Hence, if the objective of the Christian and other voluntary institutions is to identify a future role they can play in supplementing the Government's efforts in the total health system, perhaps we must look at other criteria in attempting to identity that future role.

As was stated in the recommendations under the manpower objectives, priority should be given to the training of a cadre of nursing personnel similar to the auxiliary nurse midwife, i.e., a cadre experientially prepared to meet the primary health care needs of rural India.

The methodology of this type of experience-based learning has often been discussed but there are very many variables and results are uncertain. Therefore, it would seem imprudent to suggest revisions of entire systems without first testing on a small scale the practical implications of implementation.

Thus far, most programmes have been hospital based and a great deal of data is available in this report which can be used to suggest changes within the present training systems.

Three pilot project might be attempted with a view to evaluating and analysing various factors to be introduced if future systems changes are attempted.

In order to provide wide variance in the base of the pilot programmes, it is suggested that:

One be located within an already well-planned organised programme in the voluntary sector, which has been in operation from two to five years

A second be developed at the same time as the development in a community health and development programme. This could test what special advantages and disadvantages are involved when the two are developed simultaneously.

A third be located within the Government block with the primary health centre used as site for the training programme. In this context, the training programme could be developed and operated by the voluntary sector and the primary health centre could be operated by the Government.

It is suggested that in determing the curriculum for these pilot projects, consideration be given to the curriculum currently being developed by the Government of India for the training of Multi-purpose workers as well as to the curriculum suggestions contained in the Report of the Committee to Review Auxiliary Nurse Midwife Training Programmes dated August, 1972.

We consider it essential that these training programmes be established in the simplest possible setting, the major -criterion being the possibility of achieving the programme's objectives. We recommend the utilization of existing structures for both residence and teaching facilities within the village chosen for the pilot project, consideration being given to the safety and health of the students; and the utilization of existing institutions and teaching staffs within the area for elements of the curriculum which must be taught in a more controlled situation than the village can provide.

It is recommended that each pilot project limit the number of students be between six and ten and that selection be based both on the degree of motivation towards this type of village-level service, and the ability of the candidate to comprehend and implement the curriculum. Tools must be devised for testing both attitudes and aptitudes of the candidates.

The programmes should be conducted in the local language. Because of the small number of students, the only required addition to the development staff would be one or two public health tutors. Their primary responsibility would be to teach, supervise, and evaluate the students in the village. These tutors must be proficient in the local language and, ideally, prepared for their role by an orientation programme which would result in action planning, e.g., practical class planning in the village

setting, using teaching aids and situations readily availab'e.

It is recommended that these experimental programmes be located in an area where the need is greatest, the chances for success are highest, the population is relatively stable, the potential for economic development is apparent, the local population will co-operate, and where the local government officials and other area leaders manifest a favourable attitude.

Sponsors of such a programme would be required to guarantee employment after successful completion of the course in order to ensure economic benefit for pilot project candidates.

For the present, we recommend consideration of the following measures by the Christian and other voluntary hospitals in order to supplement the Government's on-going effort to meet India's greatest health needs:

1. Revise the present programmes so as to ensure the training of nursing personnel qualified for and committed to work in the rural areas. All training schools must take more seriously their obligation to provide actual village experience, perhaps even beyond the Indian Nursing Council reqirements. This experience must be varied, stimulating, guided, supervised, and evaluated by teaching personnel in a rural, non-institutional setting.

2. Ensure that the training personnel from both the schools and hospitals are highly motivated towards village primary health work, thereby inspiring the students along these lines. Special awards might be granted to both faculty and students who evidence the highest level of commitment to primary health care service in rural areas. In the selection process, relaxation of requirements for admission should be considered for those students whose tests demonstrate a high level of motivation for rural work.

3. Invest resources for nursing training mainly in innovative programmes which seek to produce personnel for the rural non-institutional primary health care services. Further financial investments in the existing training system should be de-emphasized.

4. Permit alternative methods of payment for general nursing and/or nurse midwife training to alleviate the current drain on hospital resources.

A. Students who are financially able to pay for their own education should be required to do so.

B. Students who are financially unable to pay for their education should be given loans repayable in monthly instalments following graduation. This would allow women from poorer backgrounds to enter the profession.

5. Minimize the instability inherent in the present staffing pattern by developing two-year Practical Nurse training courses to qualify nurses for many of the usual nursing activities, but not sufficiently for employment overseas. In-service education programmes could be utilized for continually up-dating their skills.

With respect to the present auxiliary nurse midwifery programmes, several difficulties are worthy of special note:

1. Eighty per cent of the auxiliary nurse midwifery schools reported problems in finding text books, reference books and teaching aids in the regional languages. It is recommended that the State Voluntary Health Associations take responsibility for the translation of teaching materials into the regional languages of the States.

2. Sixty per cent of these schools reported inability to hire teachers capable of teaching in regional languages. It is recommended that local people in all regions, with proficiency in the regional language be urged to pursue the necessary qualifications for teaching in these schools.

3. It is recommended that teachers receive special orientation for training auxiliary nurse midwives despite their qualifications as teachers of general nursing courses.

SOCIOLOGICAL OBJECTIVES

To study the profile of the nurse.

To assess the socio-economic impact of nursing training on the individual and the community.

PROFILE OF THE NURSE

Profile of the B.Sc. student :

She is approximately 16-20 years of age, unmarried, pre-university or higher secondary education. Her father is between 40 and 60 and his educational level is at least matriculation or higher, with only 2.6 to 6 percent illiteracy, he is non-farmer and non-manual labourer, earning at least Rs. 600 per month, with an average family size of 7 members. She has chosen nursing because she thinks it is a noble career in which she can serve people directly. As a nurse, she prefers patient care to other nursing functions and is interested primarily in medical-surgical or pediatric nursing. The probability of finding a job and possible opportunities for going abroad seem to be part of the motivation for these students.

Profile of Post-basic student :

She is over 26, may be married or unmarried. Her father, if living, (30% are deceased), is over 50 years of age and his educational level is at least matriculation or intermediate, he is non-farmer, non-manual labourer, earning at least rupees 300 per month, with an average family size of 7 members. She has chosen nursing because she thinks it is a noble profession where she can directly serve people. As a nurse she prefers patient care to other forms of nursing and is interested either in medical-surgical nursing or community health.

Profile of G.N. student :

She is approximately 16-25 years of age, unmarried, matriculate. Her father is between 40-60 years of age and his maximum education is upto matriculation/intermediate with 21.4% illiteracy, he is employed in various occupations, including farming and manual labour, earning less than Rupees 300 per month, with an average family size of 7 members. She is likely to marry a husband earning between Rupees 150-500 whose occupation is either clerical, technical, or professional, with at least a matriculation level of education. She has chosen nursing because she thinks it is a noble career in which she can serve people directly. She prefers patient care to other nursing functions and is primarily interested in medical-surgical nursing. She is likely to continue in the profession until improved family circumstances permit her to discontinue.

Profile of the ANM student :

She is approximately 16-25 years of age, unmarried, non-matriculate. Her father is between 40-60, not likely to be a matriculate, with 32.5% illiteracy. He is employed in various occupations, but primarily in farming and manual labour, earning less than Rupees 300 per month, with an average family size of 8 members. She is likely to marry a husband earning upto Rupees 300 per month and employed in either a clerical, technical or professional capacity with not more than matriculation. She has chosen nursing because she thinks it is a noble profession in which she can serve people directly, her family wanted her to join this career, and she can get a job easily and earn even as a student. 65% of these students depend on their stipends for continuing their training. She prefers patient care to other nursing functions and wishes to work in a hospital.

Nurses of all groups between 21 and 40 years of age have a desire for continuing education, but the lack of study leave and family financial circumstances are the largest factors preventing them from doing so.

Approximately 50% of the nurses wish to work abroad with a higher desire among the age group 26-30 and a substantial decline in the desire after age 45.

The vast majority (82.98%) would choose nursing as a career if they had an opportunity to choose again. This is the case among the married and unmarried, regardless of religion.

Nurses of all groups experience normal job satisfaction. This applies to the married and unmarried and does not vary substantially in government, church-related or privately owned institutions.

Most outsiders look on nurses as having a "fair" social status and this does not differ substantially from region to region. However, in the northern and

western regions there is some tendency to regard nursing as having "low" social status, and some tendency in the eastern region to regard it as having a"high" social status. There is no substantial variance in these attitudes between urban and rural areas. Most areas or people experience the professional service of the nurse as "fair" or "good".

On the whole, most men have a positive attitude towards marrying a nurse, though only 60% of the GNs and 63% of the ANMs do marry, the former at an average of 28 years and the latter at an average age of 21 years.

Entry into the nursing profession seems to provide upward mobility for the manual labour, agricultural, and clerical classes. Training as a nurse enhances a woman's economic prospects by increasing her own earning power and enabling her to marry a man whose average monthly income is higher than that of her guardian.